

REPORT
OF
THE SECRETARY OF THE NAVY,

COMMUNICATING,

*In compliance with a resolution of the Senate of the 27th of last August,
information respecting the construction of a dock at Pensacola.*

DECEMBER 30, 1856.—Read, ordered to lie on the table and be printed.

NAVY DEPARTMENT, *December 27, 1856.*

SIR: In reply to the resolution of the Senate of August 27, 1856, that the Secretary of the Navy cause a thorough examination "to be made by a board of military and civil engineers of the condition and probable duration of the wooden dock at the Pensacola navy yard, together with the annual expense of maintaining it in working condition; and, also, the cost of constructing at said yard, upon the most approved plan, a permanent stone dock, for docking the largest naval vessels which the depth of water on the Pensacola bar admits," I have the honor to transmit herewith a copy of the report of the examination made by a board of military and civil engineers, in compliance with the resolution.

I am, sir, very respectfully, your obedient servant,

J. C. DOBBIN.

Hon. J. D. BRIGHT,

President of the United States Senate.

NAVY YARD, PENSACOLA HARBOR,
December 8, 1856.

SIR: The undersigned, by letter of the 7th ultimo from the Secretary of the Navy, constituting a board for the objects designated in the following resolution of the Senate of the United States, passed 27th August, 1856, "*Resolved*, That the Secretary of the Navy cause a thorough examination to be made, by a board of military and civil engineers, of the condition and probable duration of the wooden dock at the Pensacola navy yard, together with the annual expense of maintaining it in working condition; and, also, the cost of constructing, at said yard, upon the most approved plan, a permanent stone dock, for docking the largest naval vessels which the depth of water on the

Pensacola bar admits," convened at the navy yard on the 25th November, and, having performed the duties assigned them, respectfully report:

The board (owing to the illness and subsequent decease of James Herron, civil engineer, one of its members) was deprived, during its whole session, of his valuable and efficient co-operation, and the surviving members of the board wish to place here on record the testimony of their respect to the memory of the deceased, and their sense of the loss to the public service, occasioned by this melancholy event.

Condition and probable duration of the wooden dock.

Under this head the board made the necessary examination of the outside and inside of the dock, by boring into the timbers and planking in those places where the rot might be expected soonest to be developed.

The results of the examination show that the rot has decidedly manifested itself in the large timbers constituting the framing of the side walls, and in the upright timbers of the gates of the dock; and the board, considering the progress of decay since the construction of the dock, and the causes which will facilitate the further deterioration of this structure, are of the opinion that, after the lapse of five (5) years, it will be hazardous to dock a ship, unless the sides of the dock and its gates shall have been first re-constructed.

The causes which have been (and will continue to be) active in the destruction of this dock are these:

1. The partial filling only of the side walls with water, and the high temperature which exists in those recesses.

2. The exposure of the ends of the upright timbers of the gates, without covering, to the influence of the sun and rain.

3. The partial filling only of the main chamber of the dock with water, and the exposure of this part to the weather.

Under the item therefore, of deterioration of dock, the board is of opinion that the annual expenditure will be from \$40,000 to \$50,000 during the next five (5) years.

Annual expense of maintaining the dock in a working condition.

Under this head are enumerated only those current and usual repairs incident to an otherwise sound condition of the dock.

The floating-gate of the basin is much eaten with the worms, and will require re-construction, at a cost of \$13,000. This sum, being divided by the number of years representing the probable duration of the dock, will give, as the annual amount of repairs, \$2,600.

Annual repairs of floating-gate.....	\$2,600
“ painting	8,000
“ caulking	1,300
“ repairs of wood work (casual).....	250
“ “ engines and pumps.....	500
“ “ blocks, falls, and gates.....	1,000
“ cleaning and attendance.....	1,659

Total annual repairs and expenses.....	<u>8,100</u>
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Cost of constructing, at Pensacola navy yard, upon the most approved plan, a permanent stone dock, for docking the largest naval vessels which the depth of water on the Pensacola bar admits.

The board, having decided on a suitable site for the location of a stone dry dock, (sketch A,) examined with great care the records of borings, made in former years in this vicinity, and likewise executed a boring at one point of the proposed site.

The information thus obtained, as well as the experience derived from the successful construction of the permanent wharf, leave no doubt of the practicability of constructing a stone dry dock at a reasonable cost.

Estimated cost of stone dry dock.

Excavation.....	\$50,000
Coffer-dam and sheet piling.....	46,800
Foundation.....	136,608
Masonry.....	776,572
Culvert and well.....	55,000
Gates.....	150,000
Drainage.....	20,000
Engine house.....	40,000
Stone pier wharf.....	125,000
Engine and boilers.....	35,000
Tools and fixtures.....	60,000
Removing coffer-dam.....	10,000
Contingent.....	20,000
Total.....	1,524,980

In making this estimate, the board has adhered to existing prices of work and materials, and has endeavored to make such a liberal allowance, under the several items, as to give confidence that the work, under the supervision of a competent engineer, can be undertaken and completed for the sum estimated.

Recapitulation.

FLOATING DOCK.—General condition, serviceable; probable duration, five (5) years; annual deterioration, for succeeding five (5) years, \$40,000 to \$50,000.

Annual, casual, and current repairs during succeeding five (5) years, \$8,000.

STONE DRY DOCK.—Construction, practicable; estimated cost, \$1,524,980.

Respectfully submitted.

CALVIN BROWN,
Civil Engineer.

JOHN NEWTON,
Captain Corps of Engineers.

Hon. J. C. DOBBIN,
Secretary of the Navy, Washington.

That the Board of Commissioners of the State of Tennessee, acting under the authority of the General Assembly, have caused to be prepared and published a report of the Board of Commissioners, in relation to the State of Tennessee, for the year ending at the close of the year 1890, and the same is hereby published for the use of the people of the State of Tennessee.

State of Tennessee	1890
Population	1,000,000
Area	60,000
Capital	Memphis
Chief Executive	Governor
Legislative	General Assembly
Judicial	Supreme Court
Executive	State Department
Financial	Treasury
Education	Board of Education
Religion	Board of Christian Missions
Industry	Manufacturing
Commerce	Shipping
Transportation	Railroads
Health	Sanitary
Police	Police Department
Fire	Fire Department
Water	Waterworks
Gas	Gas Works
Electric	Electric Light and Power
Telegraph	Telegraph and Telephone
Post	Post Office
Customs	Customs
Excise	Excise
Liquor	Liquor
Gambling	Gambling
Lottery	Lottery
Public Lands	Public Lands
State Lands	State Lands
State Debt	State Debt
State Revenue	State Revenue
State Expenditure	State Expenditure
State Property	State Property
State Archives	State Archives
State Library	State Library
State Museum	State Museum
State Observatory	State Observatory
State Hospital	State Hospital
State Prison	State Prison
State Penitentiary	State Penitentiary
State Reformatory	State Reformatory
State Asylum	State Asylum
State School	State School
State University	State University
State Normal School	State Normal School
State Agricultural College	State Agricultural College
State Medical College	State Medical College
State Law School	State Law School
State Theological Seminary	State Theological Seminary
State Synod	State Synod
State Conference	State Conference
State Convention	State Convention
State Assembly	State Assembly
State Synagogue	State Synagogue
State Mosque	State Mosque
State Church	State Church
State Temple	State Temple
State Shrine	State Shrine
State Monastery	State Monastery
State Convent	State Convent
State Priory	State Priory
State Abbey	State Abbey
State Bishopric	State Bishopric
State Archdiocese	State Archdiocese
State Patriarchate	State Patriarchate
State Synod	State Synod
State Conference	State Conference
State Convention	State Convention
State Assembly	State Assembly
State Synagogue	State Synagogue
State Mosque	State Mosque
State Church	State Church
State Temple	State Temple
State Shrine	State Shrine
State Monastery	State Monastery
State Convent	State Convent
State Priory	State Priory
State Abbey	State Abbey
State Bishopric	State Bishopric
State Archdiocese	State Archdiocese
State Patriarchate	State Patriarchate

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Commerce	Shipping
Transportation	Railroads
Health	Sanitary
Police	Police Department
Fire	Fire Department
Water	Waterworks
Gas	Gas Works
Electric	Electric Light and Power
Telegraph	Telegraph and Telephone
Post	Post Office
Customs	Customs
Excise	Excise
Liquor	Liquor
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